Amendments to the Claims

Kindly amend claims 1, 6-7, 10, 15-16, 20 and 25-26, as set forth below. The changes in the amended claims are shown by strikethrough for deleted matter and underlining for added matter.

1.   (Currently Amended) A method of facilitating allocation of resources in a heterogeneous computing environment comprising a plurality of nodes, said method comprising:

obtaining, by a resource manager executing on a processor of the heterogeneous computing environment, one or more attributes of at least one node of the plurality of nodes of the heterogeneous computing environment, the at least one node having a native architecture and supporting one or more non-native architectures, and wherein the one or more attributes specify the one or more non-native architectures supported by the at least one node, said one or more non-native architectures being different than said native architecture;

receiving by the resource manager a request to be processed by the heterogeneous computing environment, said request having specific resource requirements associated therewith;

selecting by the resource manager at least one processing node of the plurality of nodes to process the request, the selecting comprising:

determining which one or more nodes of the plurality of nodes have a native architecture compatible with the specific resource requirements of the request or support, as indicated by the obtained one or more attributes, a non-native architecture compatible with the specific resource requirements of the request; and

choosing from those one or more nodes that have a compatible native architecture or support a compatible non-native architecture the at least one processing node to process the request; and

<u>allocating one or more resources of the at least one processing node to the specific request to process the specific request.</u>

~~obtaining, by a resource manager executing on a processor of the heterogeneous computing environment, one or more attributes relating to a node coupled to the resource manager, wherein said node is of the heterogeneous computing environment and is of a native architecture, and wherein the one or more attributes specify one or more non-native architectures supported by the node, said one or more non-native architectures being different than said native architecture;~~

~~determining by the resource manager using the obtained one or more attributes that specify one or more non-native architectures supported by the node whether the node supports an architecture capable of executing a specific request, wherein the specific request specifies the architecture for the specific request that is different from the native architecture of the node; and~~

~~allocating one or more resources of the node to the specific request, in response to the determining indicating the node supports the architecture of the request.~~

2-4.   (Canceled)

5.   (Previously Presented) The method of claim 1, wherein the specific request comprises a program to be executed.

6.   (Currently Amended) The method of claim 1, wherein the obtaining comprises providing by the <u>at least one </u>node the one or more attributes to the resource manager.

7.   (Currently Amended) The method of claim 6, wherein the providing of the one or more attributes by the<u> at least one </u>node to the resource manager is via one or more other resource managers coupled to the<u> at least one </u>node.

8.   (Original) The method of claim 7, wherein the resource manager is a grid resource manager, and the one or more other resource managers comprise one or more cluster resource managers.

9.   (Original) The method of claim 1, wherein the heterogeneous computing environment comprises a grid computing environment and said resource manager comprises a grid resource manager.

10.   (Currently Amended) A computer system for facilitating allocation of resources in a heterogeneous computing environment comprising a plurality of nodes, the computer system comprising:

a memory; and

a processor in communications with the memory, wherein the computer system is capable of performing a method, said method comprising:

obtaining, by a resource manager of the heterogeneous computing environment, one or more attributes of at least one node of the plurality of nodes of the heterogeneous computing environment, the at least one node having a native architecture and supporting one or more non-native architectures, and wherein the one or more attributes specify the one or more non-native architectures supported by the at least one node, said one or more non-native architectures being different than said native architecture;

receiving by the resource manager a request to be processed by the heterogeneous computing environment, said request having specific resource requirements associated therewith;

selecting by the resource manager at least one processing node of the plurality of nodes to process the request, the selecting comprising:

determining which one or more nodes of the plurality of nodes have a native architecture compatible with the specific resource requirements of the request or support, as indicated by the obtained

one or more attributes, a non-native architecture compatible with the specific resource requirements of the request; and

choosing from those one or more nodes that have a compatible native architecture or support a compatible non-native architecture the at least one processing node to process the request; and

allocating one or more resources of the at least one processing node to the specific request to process the specific request.

~~obtaining, by a resource manager of the heterogeneous computing environment, one or more attributes relating to a node coupled to the resource manager, wherein said node is of the heterogeneous computing environment and is of a native architecture, and wherein the one or more attributes specify one or more non-native architectures supported by the node, said one or more non-native architectures being different than said native architecture;~~

~~determining by the resource manager using the obtained one or more attributes that specify one or more non-native architectures supported by the node whether the node supports an architecture capable of executing a specific request, wherein the specific request specifies the architecture for the specific request that is different from the native architecture of the node; and~~

~~allocating one or more resources of the node to the specific request, in response to the determining indicating the node supports the architecture of the request.~~

11-13. (Canceled)

14.   (Previously Presented) The computer system of claim 10, wherein the specific request comprises a program to be executed.

15.   (Currently Amended) The computer system of claim 10, wherein the obtaining comprises providing by the <u>at least one </u>node the one or more attributes to the resource manager.

16. (Currently Amended) The computer system of claim 15, wherein the providing of the one or more attributes by the at least one node to the resource manager is via one or more other resource managers coupled to the at least one node.

17. (Previously Presented) The computer system of claim 16, wherein the resource manager is a grid resource manager, and the one or more other resource managers comprise one or more cluster resource managers.

18. (Previously Presented) The computer system of claim 10, wherein the heterogeneous computing environment comprises a grid computing environment and said resource manager comprises a grid resource manager.

19. (Canceled)

20. (Currently Amended) A computer program product for facilitating allocation of resources in a heterogeneous computing environment comprising a plurality of nodes, the computer program product comprising:

> a storage medium device readable by a processor and storing instructions for execution by the processor for performing a method comprising:

>> obtaining, by a resource manager of the heterogeneous computing environment, one or more attributes of at least one node of the plurality of nodes of the heterogeneous computing environment, the at least one node having a native architecture and supporting one or more non-native architectures, and wherein the one or more attributes specify the one or more non-native architectures supported by the at least one node, said one or more non-native architectures being different than said native architecture;

>> receiving by the resource manager a request to be processed by the heterogeneous computing environment, said request having specific resource requirements associated therewith;

>> selecting by the resource manager at least one processing node of the plurality of nodes to process the request, the selecting comprising:

determining which one or more nodes of the plurality of nodes have a native architecture compatible with the specific resource requirements of the request or support, as indicated by the obtained one or more attributes, a non-native architecture compatible with the specific resource requirements of the request; and

choosing from those one or more nodes that have a compatible native architecture or support a compatible non-native architecture the at least one processing node to process the request; and

allocating one or more resources of the at least one processing node to the specific request to process the specific request.

~~obtaining, by a resource manager of the heterogeneous computing environment, one or more attributes relating to a node coupled to the resource manager, wherein said node is of the heterogeneous computing environment and is of a native architecture, and wherein the one or more attributes specify one or more non-native architectures supported by the node, said one or more non-native architectures being different than said native architecture;~~

~~determining by the resource manager using the obtained one or more attributes that specify one or more non-native architectures supported by the node whether the node supports an architecture capable of executing a specific request, wherein the specific request specifies the architecture for the specific request that is different from the native architecture of the node; and~~

~~allocating one or more resources of the node to the specific request, in response to the determining indicating the node supports the architecture of the request.~~

21-23. (Canceled)

24.   (Previously Presented) The computer program product of claim 20, wherein the specific request comprises a program to be executed.

25. (Currently Amended) The computer program product of claim 20, wherein the obtaining comprises providing by the at least one node the one or more attributes to the resource manager.

26. (Currently Amended) The computer program product of claim 25, wherein the providing of the one or more attributes by the at least one node to the resource manager is via one or more other resource managers coupled to the at least one node.

27. (Previously Presented) The computer program product of claim 26, wherein the resource manager is a grid resource manager, and the one or more other resource managers comprise one or more cluster resource managers.

28. (Previously Presented) The computer program product of claim 20, wherein the heterogeneous computing environment comprises a grid computing environment and said resource manager comprises a grid resource manager.